PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

1. (Currently Amended) A method for processing one or more signals in a spread spectrum communication system, the method comprising:

receiving and processing the one or more signals to provide one or more streams of samples; ~~and~~

first processing the one or more streams of samples to provide a first stream of recovered symbols, wherein [[the]] first processing ~~includes~~ comprises:

equalizing the one or more streams of samples with an equalizer to generate symbol estimates, wherein equalizing comprises quantizing the symbol estimates, and

processing the symbol estimates to provide the first stream of recovered ~~symbols.~~ symbols, comprising:

despreading the symbol estimates with a PN sequence to generate despread symbols, and

decovering the despread symbols to generate the first stream of recovered symbols;

wherein despreading and decovering are selectively performed, depending on a data rate of the one or more received signals;

second processing a multipath of the one or more streams of samples with one or more rake receivers to provide a second stream of recovered symbols;

estimating a signal quality associated with each of the first and second processing; and

selecting the first or second processing based on estimated signal qualities associated therewith.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Previously Presented) The method of claim 1, wherein the signal quality associated with the first processing is estimated based on a mean square error (MSE) between the symbol estimates and expected symbols.

7. (Currently Amended) The method of claim 6, wherein a data rate of the one or more signals is selected based, in part, on the mean square error.

8. (Currently Amended) The method of claim 1, wherein for the first processing, the step of processing the symbol estimates comprises combining the symbol estimates, and wherein [[the]] equalizing the one or more streams of samples is performed prior to combining.

9. (Currently Amended) The method of claim 1, wherein [[the]] first ~~processing,~~ processing further comprises combining the one or more streams of samples ~~is performed~~ prior to [[the]] equalizing the one or more streams of samples.

10. (Original) The method of claim 1, further comprising:

first adapting coefficients of each of one or more filters within the equalizer, wherein one filter is operative to filter each of the one or more streams of samples.

11. (Original) The method of claim 10, wherein the first adapting is performed for each filter based on filtered samples from the filter.

12. (Original) The method of claim 10, wherein the first adapting is performed for the one or more filters based on the symbol estimates.

13. (Original) The method of claim 10, wherein the coefficients of each filter are initialized to particular set of values.

14. (Original) The method of claim 10, further comprising:

identifying a large multipath of one of the one or more signals being received and processed, and

wherein the first adapting is performed based on a time offset corresponding to the identified large multipath.

15. (Original) The method of claim 10, wherein the first adapting attempts to minimize a mean square error between the symbol estimates and expected symbols.

16. (Original) The method of claim 10, wherein the first adapting attempts to minimize a mean square error between the filtered samples from the filter and expected symbols.

17. (Original) The method of claim 10, further comprising:

slicing the symbol estimates to generate sliced symbol estimates, and

wherein the first adapting is performed using the sliced symbol estimates.

18. (Original) The method of claim 10, wherein each filter within the equalizer is implemented as a finite impulse response (FIR) filter.

19. (Original) The method of claim 10, wherein the first adapting is performed using time division multiplexed (TDM) pilot reference.

20. (Original) The method of claim 10, wherein the first adapting is performed using code division multiplexed (CDM) pilot reference.

21. (Original) The method of claim 10, wherein the first adapting is performed using a least mean square (LMS) algorithm.

22. (Original) The method of claim 10, wherein the first adapting is performed using a recursive least square (RLS) algorithm.

23. (Original) The method of claim 10, wherein the first adapting is performed using a direct matrix inversion (DMI) algorithm.

24. (Currently Amended) The method of claim 10, wherein first processing further comprises combining [[is]] the one or more streams of samples ~~performed~~ based on one or more scaling factors, one scaling factor for each of the one or more streams of samples.

25. (Original) The method of claim 24, further comprising:

second adapting the one or more scaling factors prior to the combining.

26. (Original) The method of claim 25, further comprising:

identifying a large multipath for each of the one or more signals being received and processed, and

initializing each scaling factor based on a respective identified large multipath.

27. (Original) The method of claim 25, wherein the second adapting is performed based on the symbol estimates.

28. (Currently Amended) The method of claim [[1,]] 8, further comprising:

first adapting coefficients of each of one or more filters within the equalizer, wherein one filter is operative to filter each of the one or more streams of samples; and

second adapting one or more scaling factors used for the combining.

29. (Original) The method of claim 28, wherein the first and second adapting are performed separately and sequentially, wherein the first adapting is performed with the one or more scaling factors fixed, and wherein the second adapting is performed with the coefficients for the one or more filters fixed.

30. (Original) The method of claim 28, wherein the first and second adapting are performed iteratively a number of times.

31. (Original) The method of claim 28, wherein the first and second adapting are performed iteratively over a particular sequence of expected symbols.

32. (Original) The method of claim 28, wherein the first and second adapting are performed based on the symbol estimates.

33. (Cancelled)

34. (Cancelled)

35. (Cancelled)

36. (Currently Amended) ~~The~~ A method ~~of claim 34,~~ for processing one or more signals in a communication system, the method comprising:

receiving and processing the one or more signals to provide one or more streams of samples;

first processing the one or more streams of samples to provide a first stream of recovered symbols, wherein the first processing comprises:

equalizing the one or more streams of samples with an equalizer to generate symbol estimates, wherein equalizing comprises quantizing the symbol estimates, and

processing the symbol estimates to provide the first stream of recovered symbols;

second processing a multipath of the one or more streams of samples with one or more rake receivers to provide a second stream of recovered symbols;

estimating a signal quality associated with each of the first and second processing;

selecting the first or second processing based on estimated signal qualities associated therewith; and

adapting coefficients of each of one or more filters within the equalizer;

wherein the coefficients of each filter within the equalizer are adapted using a time division multiplexed (TDM) pilot reference or a code division multiplexed (CDM) pilot reference.

37. (Currently Amended) ~~The~~ A method ~~of claim 34,~~ for processing one or more signals in a communication system, the method comprising:

receiving and processing the one or more signals to provide one or more streams of samples;

first processing the one or more streams of samples to provide a first stream of recovered symbols, wherein the first processing includes

equalizing the one or more streams of samples with an equalizer to generate symbol estimates, wherein equalizing comprises quantizing the symbol estimates, and

processing the symbol estimates to provide the first stream of recovered symbols;

second processing a multipath of the one or more streams of samples with one or more rake receivers to provide a second stream of recovered symbols;

estimating a signal quality associated with each of the first and second processing;

selecting the first or second processing based on estimated signal qualities associated therewith; and

adapting coefficients of each of one or more filters within the equalizer;

wherein the coefficients of each filter within the equalizer are adapted using a least mean square (LMS) algorithm, a recursive least square (RLS) algorithm, a direct matrix inversion (DMI) algorithm, or a combination thereof.

38. (Cancelled)

39. (Cancelled)

40. (Cancelled)

41. (Cancelled)

42. (Cancelled)

43. (Cancelled)

44. (Cancelled)

45. (Cancelled)

46. (Cancelled)

47. (Cancelled)

48. (Cancelled)

49. (Cancelled)

50. (Currently Amended) ~~The~~ A receiver unit ~~of claim 49,~~ operative to process one or more signals in a communication system, the receiver unit comprising:

one or more pre-processors operative to receive and process the one or more signals to provide one or more streams of samples;

an equalizer coupled to the one or more pre-processors and operative to receive, combine, and equalize the one or more streams of samples to generate symbol estimates; and

a post processor coupled to the equalizer and operative to receive and process the symbol estimates;

wherein the equalizer comprises:

one or more multipliers respectively coupled to the one or more pre-processors, each of the multipliers operative to receive and multiply a respective stream of samples with a respective scaling factor to provide scaled samples;

a summer coupled to the one or more multipliers and operative to receive and sum the scaled samples from the one or more multipliers to provide summed samples;

a slicer coupled to the summer to receive and quantize the symbol estimates to generate sliced symbol estimates;

a filter coupled to the summer and operative to receive and filter the summed samples with a set of coefficients to provide the symbol estimates;

a coefficient adjustment element coupled to the filter and operative to adapt the set of coefficients for the filter based on the symbol estimates; and

~~wherein the equalizer further includes~~

a slicer coupled to the filter and operative to receive and slice the symbol estimates to generate sliced symbol ~~estimates,~~ estimates; ~~and~~

wherein the coefficient adjustment element is operative to adapt the set of coefficients for the filter based on the sliced symbol estimates.

51. (Cancelled)

52. (Cancelled)